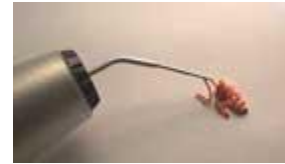


Elements Obturation Unit (Project 04-39) (9/05)



The SybronEndo Elements Obturation Unit (EOU) is a thermoplastic gutta percha/RealSeal injector with backfill, down-pack, cautery and hot-pulp testing capability. RealSeal is a polyester alternative to gutta percha, marketed by SybronEndo. The EOU consists of a control module with graphical display, an extruder handpiece, and a heat-producing plugger similar to the SybronEndo stand-alone System B. The micromotor-driven extruder utilizes convenient single-use gutta percha/RealSeal cartridges, which are said to minimize tedious clean-up time and cross-contamination. The extruder tips are pre-bent at 45 and are available in 20, 23, and 25-gauge sizes. The System B/heated



plugger handpiece comes with interchangeable tips (i.e., Plugger, Touch n Heat, Hot-Pulp-Test, Cautery) and pre-set programs for temperature and time which may be adjusted to suit individual preferences. Both handpieces are equipped with autoclavable aluminum sheaths. The unit comes with a 1-year warranty, weighs 2.8 lbs, measures 6.2 x 7.0 x 5.5 in, and is available in 100/240 VAC, 50/60 Hz.

Manufacturer:

SybronEndo
1332 South Lone Hill Ave.
Glendora, CA 91740
(800) 346-3636
(714) 516-7979
(714) 628-8503 FAX
www.sybronendo.com

Suggested Retail Price:

\$2,395.00 Elements Obturation Unit (item 973-0322)
\$449.75 Buchanan Heat Pluggers (item 952-0003)
\$46.80 20/23/25 GA GP Cartridge 10 Pk (items 972-1001/1002/1003)
\$62.40 20/23 GA RealSeal Cartridge 10 Pk (items 972-2001/2002)

Government Price:

\$1,725.00 Elements Obturation Unit (item 973-0322)
\$315.00 Buchanan Heat Pluggers (item 952-0003)
\$31.50 20/23/25 GA GP Cartridge 10 Pk (items 972-1001/1002/1003)
\$42.00 20/23 GA RealSeal Cartridge 10 Pk (items 972-2001/2002)

ADVANTAGES:

- + Extruder and heated plugger combined in one compact unit
- + Extruder performed reliably throughout the evaluation
- + Heated plugger with multi-functional capabilities
- + Disposable, single-use cartridges
- + Cartridges provide faster clean-up, enhance infection control
- + Thermoplasticizes both gutta percha and RealSeal (polyester)
- + No complaints of heat build-up during the evaluation
- + Autoclavable handpiece sheaths
- + Comes 110/220 VAC ready, with electrical connectors for either

DISADVANTAGES:

- Handpiece may be too large/heavy for small hands
- More expensive than other units due to diverse capabilities

SUMMARY AND CONCLUSIONS:

The Elements Obturation Unit (EOU), from SybronEndo, combines a thermoplastic gutta percha capability with the heated plugger capability of SybronEndos System B heat source. Evaluators appreciated having the thermoplasticizing gutta percha injector and the System B heated plugger combined into one compact unit. They found the unit easy to use and the temperature control very reliable, with no complaints of excess heat throughout the entire evaluation. Evaluators appreciated the disposable cartridges and preferred to use gutta percha over RealSeal, stating they preferred to see more clinical studies on the efficacy of RealSeal before using it (see Project 04-32 for RealSeal Evaluation). The hot pulp test and cautery function were not evaluated in this project. Most evaluators felt the handpieces were somewhat large and some thought the gutta percha was tackier than with other thermoplastic gutta percha units. Four of the eight evaluators said they would purchase the EOU. The **Elements Obturation Unit** is rated **Acceptable** for use in US Air Force dental facilities.